Amendment to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of the Claims:

Claim 1 (currently amended): A method of determining traffic paths between one or more source-destination node pairs in a communications network, comprising:

starting from a first set of paths between said source-destination node pairs, determining a second set of paths between said source-destination node pairs while taking into account a set of constraints, such that said second set of paths emulates said first set of paths, each of said paths extending from a network interface at a source node to a destination node;

wherein said first set of paths is related to the use of a first routing protocol and the second set of paths is determined for use with a second routing protocol, different from said first routing protocol.

Claim 2 (original): A method according to claim 1, wherein the second set of paths is

determined such that the traffic load on said second set of paths emulates the traffic load on said first set of paths.

Claim 3 (previously presented): A method according to claim 1, wherein the first set of paths are included in a routing and load model for said source-destination node pairs related to said first routing protocol.

Claim 4 (previously presented): A method according to claim 3, wherein said routing and load model takes into account the network topology, the route configuration resulting from the use of the first routing protocol, and a selection of source-destination node pairs.

Claim 5 (canceled).

Claim 6 (canceled).

Claim 7 (previously presented): A method according to claim 1, wherein the second set of paths is determined such that the routing using said second routing protocol is similar to the routing using said first routing protocol.

Claim 8 (previously presented): A method according to claim 1, wherein said set of constraints is related to said second set of paths.

Claim 9 (previously presented): A method according to claim 1, wherein said constraints result from network nodes limitations and/or routing protocol constraints related to said second set of paths.

Claim 10 (previously presented): A method according to claim 1, wherein said first routing protocol includes an interior gateway protocol.

Claim 11 (previously presented): A method according to claim 1, wherein said first routing protocol applies load balancing.

Claim 12 (previously presented): A method according to claim 1, wherein said first routing protocol includes an equal cost multiple paths extension.

Claim 13 (previously presented): A method according to claim 1, wherein in said second routing protocol data are routed on pre-determined paths.

Claim 14 (previously presented): A method according to claim 1, wherein said second routing protocol includes a multi-protocol label-switching traffic engineering protocol.

Claim 15 (previously presented): A method according to claim 1, wherein said constraints comprise a maximum number of paths between each source-destination node pair.

Claim 16 (previously presented): A method according to claim 1, wherein said constraints comprise that the traffic between a particular source-destinations node pair is load-balanced such that the share of traffic along any paths is a fraction with constrained integer numerator and denominator.

Claim 17 (previously presented): A method according to claim 1, wherein a search technique is used to determine said second set of paths.

Claim 18 (previously presented): A method according to claim 1, wherein one of the following search techniques are used to determine said second set of paths: "generate and test" search algorithm, constraint programming and/or mathematical programming.

Claim 19 (previously presented): A method according to claim 17, wherein an optimal search algorithm is used.

Claim 20 (previously presented): A method according to claim 17, wherein a heuristic search algorithm is used.

Claim 21 (previously presented): A method according to claim 1, wherein each source-destination node pair is treated independently.

Claim 22 (original): A method according to claim 21, comprising a method of avoiding a systematic bias for particular paths.

Claim 23 (original): A method according to claim 22, wherein ties between symmetric solutions are broken randomly.

Claim 24 (currently amended): A method of calculating traffic paths between one or more source-destination node pairs in a communications network, comprising

starting from a first set of paths between said source-destination node pairs, determining a second set of paths between said source-destination node pairs while taking into account a set of constraints, such that

i) said second set of paths is similar to the first set of paths; and

ii) the traffic load of said second set of paths is similar to the traffic load of said first set of paths;

wherein said first set of paths is related to the use of a first routing protocol and the second set of paths is determined for use with a second routing protocol, different from said first routing protocol, and each of said paths extending from a network interface at a source node to a destination node.

Claim 25 (currently amended): A method of calculating traffic paths between one or more source-destination node pairs in a communications network, comprising:

starting from a first set of paths between said source-destination node pairs determined using a first routing protocol, determining a second set of paths between said source-destination node pairs for use with a second routing protocol, such that the load balancing in said first and second routing protocols is similar, each of said paths extending from a network interface at a source node to a destination node.

Claim 26 (previously presented): A method of operating a communications network, comprising switching at least some network traffic from said first routing protocol to said second routing protocol, wherein the method includes a method of calculating traffic paths according to claim 1 and said first routing protocol

comprises an interior gateway protocol and said second routing protocol comprises a multi-protocol label-switching traffic engineering (MPLS-TE) protocol.

Claim 27 (previously presented): A method of measuring traffic between a plurality of source and destination nodes in a communications network comprising the method according to claim 1.

Claim 28 (previously presented): A method according to claim 26, wherein at least some of the traffic is protected using secondary tunnels.

Claim 29 (previously presented): A method of providing secondary paths for a communications network, comprising the method of claim 1.

Claim 30 (original): A method according to claim 29, wherein a measured maximum link load is used as the primary bandwidth for each link.

Claim 31 (previously presented): A method according to claim 29, wherein part of the remaining link capacity is used for the secondary paths.

Claim 32 (previously presented): A method according to claim 29, wherein the secondary paths are determined for the non-load balanced case.

Claim 33 (withdrawn): A method of routing traffic between nodes in a communications network, the method comprising routing the traffic from a source

node to a destination node using a first routing protocol while mimicking a second routing protocol.

Claim 34 (withdrawn): The method according to claim 33, wherein the first routing protocol is the MPLS-TE protocol, and the second protocol is the ECMP protocol.

Claim 35 (withdrawn): The method according to claim 34, comprising:

associating each of a plurality of source-destination pairs with more than one traffic path; and

splitting the traffic between a given source-destination pair between the more than one traffic paths associated with the given source-destination pair, thereby to perform load balancing.

Claim 36 (withdrawn): The method according to claim 33, comprising:

operating a distributed protocol on said nodes, the distributed protocol being adapted to automatically manage the creation of paths.

Claim 37 (withdrawn): The method according to claim 36, wherein the distributed protocol is adapted to provide for the creation of load-balancing paths.

Claim 38 (withdrawn): An apparatus according to claim 36, wherein the distributed protocol is adapted to provide for automeshing.

Claim 39 (withdrawn): The method according to claim 36, comprising issuing to each node an instruction indicating that the paths whose creation is managed automatically by said distributed protocol are to mimic IGP paths.

Claim 40 (withdrawn): The method according to claim 39, wherein said instruction is learned over said distributed protocol from the node which is to become the destination of the paths.

Claim 41 (withdrawn): An apparatus for calculating paths in a communications network, adapted to perform the method of claim 33.

Claim 42 (withdrawn): An apparatus according to claim 41, wherein said apparatus includes one or more nodes of said communications network.

Claim 43 (withdrawn): An apparatus according to claim 42, wherein said one or more nodes update the calculation of traffic paths after a change in the network topology.

Claim 44 (withdrawn): An apparatus according to claim 43, wherein a time lag is introduced between the change in the network topology and an update of the traffic paths.

Claim 45 (withdrawn): A network management system for managing a network, adapted to perform the method of claim 1.

Claim 46 (withdrawn): A computer program for performing the method of claim 1when operated in a computer system.

Claim 47 (canceled).